Chemistry 115 Name

Dr. Cary Willard

Quiz 11A (20 points) May 11, 2009

1. (4 points) Complete and balance the nuclear reaction below:

$$+\rightarrow + $$

1. (4 points) What is the essential difference between the nuclear reactions in a nuclear reactor and those in an atomic bomb?
2. (4 points) Identify the acids and bases in the following acid base equation. Draw lines linking the conjugate acid base pairs

HClO4 + OH-1 🡪 ClO4-1 + H2O

1. (4 points) Calculate the pH of a solution that is 2.5 x 10-4 M in H3O+1
2. (2 points) What is the conjugate base of the acid HNO3?
3. (2 points) What is the conjugate acid of the base CH3NH2?

Chemistry 115 Name

Dr. Cary Willard

Quiz 11A (20 points) May 12, 2009

1. (4 points) Complete and balance the nuclear reaction below:

$$+\rightarrow + $$

1. (4 points) What is the essential difference between the nuclear reactions in a nuclear reactor and those in an atomic bomb?
2. (4 points) Identify the acids and bases in the following acid base equation. Draw lines linking the conjugate acid base pairs

HClO4 + OH-1 🡪 ClO4-1 + H2O

1. (4 points) Calculate the pH of a solution that is 6.7 x 10-4 M in H3O+1
2. (2 points) What is the conjugate base of the acid HNO3?
3. (2 points) What is the conjugate acid of the base CH3NH2?